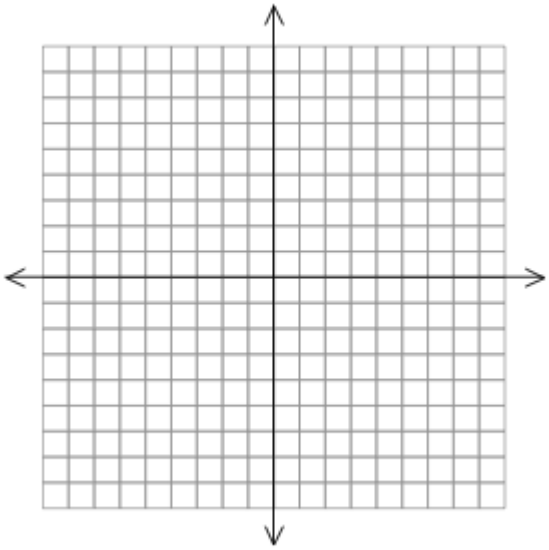
Name:_____IM1B Homework: Chapter 7: 92, Week of: May 21, 2018

HOMEWORK HELP Website: HOMEWORK.CPM.ORG

7-92 Do two lines *always* intersect? Consider this as you answer the questions below.

a. **Write a system of linear equations** that does not have a solution. Write each equation in your system in $y = mx + b$ form. **Graph your system** on the graph below and explain why it does not have a solution.



Explanations:

b. How can you tell algebraically that a system of linear equations has *no solution*? **Solve your system of equations from part (a) algebraically** and demonstrate how you know that the system has no solution.

7-104 Without graphing, determine which of the following equations represents lines that are parallel to each other. Which are perpendicular? Show how you know.

a. $-3x + y = 5$

b. $-5x + y = 3$

c. $x + 5y = -15$

d. $-15x + 5y = -25$

Which are parallel?_____

Which are perpendicular?_____